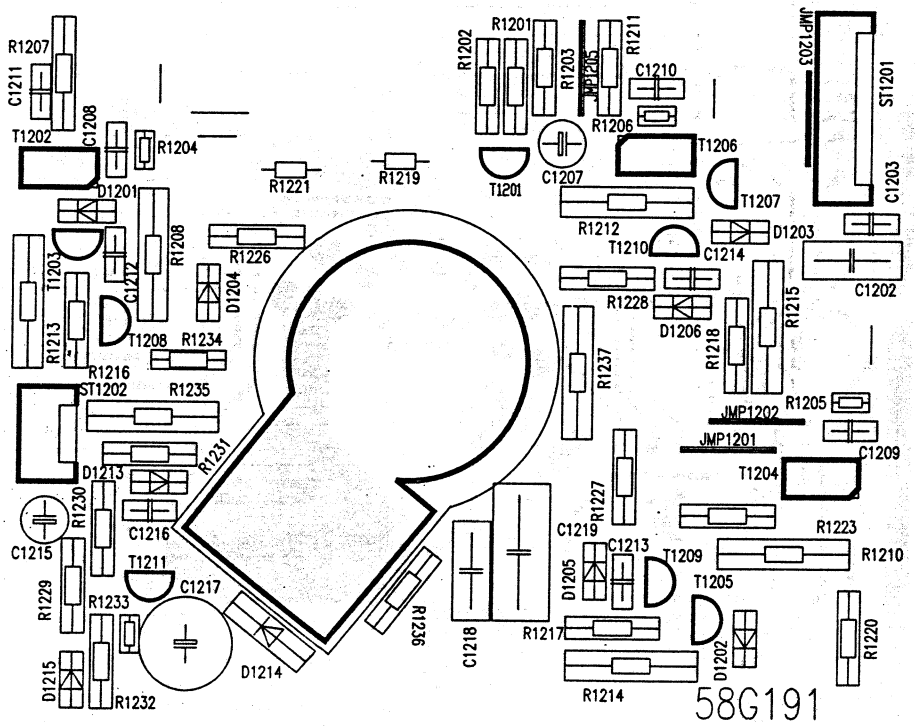
BEKO

63Y190

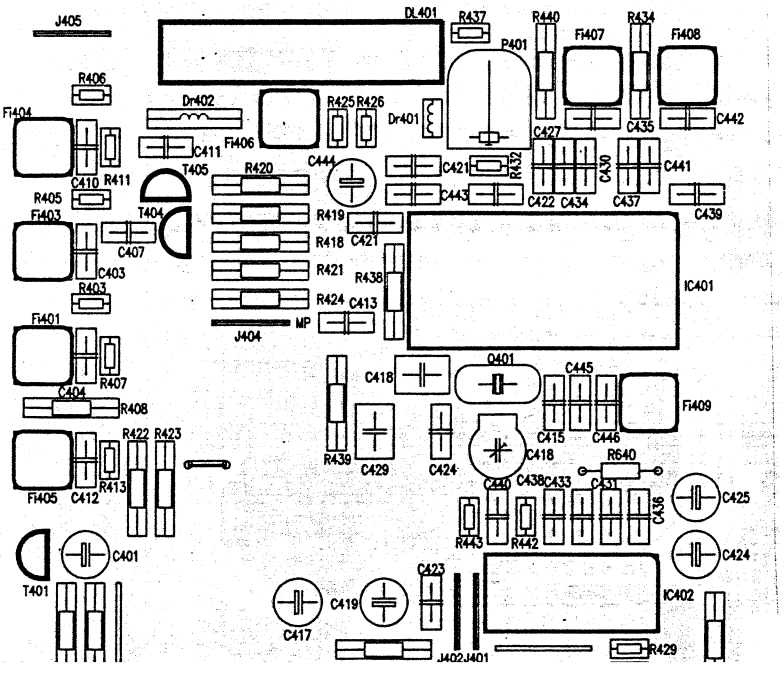
MODEL

SERVICE MANUAL

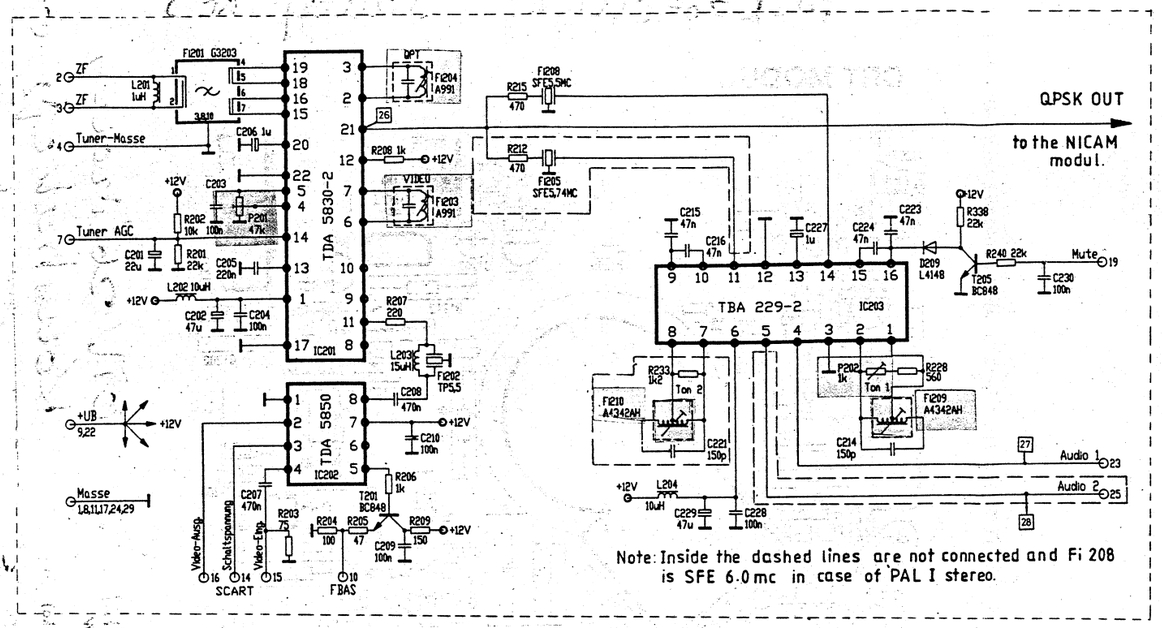
CRT MODUL



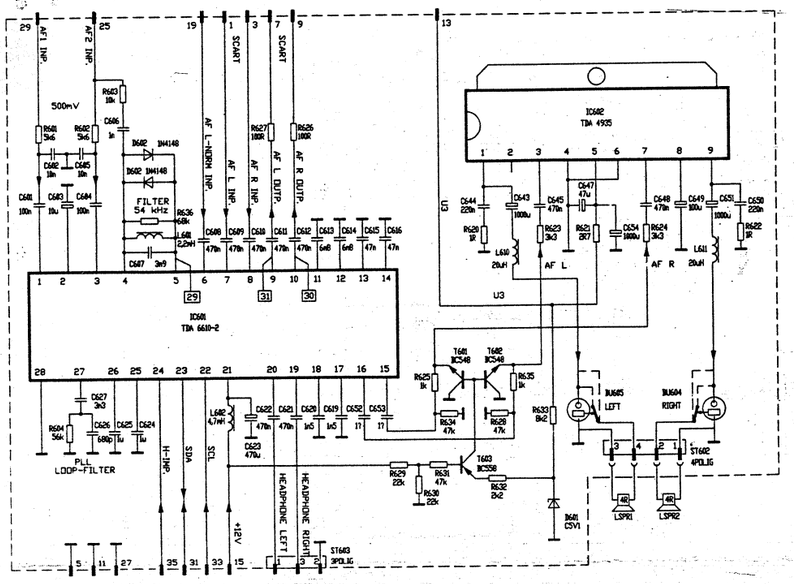
PAL/SECAM DECODER



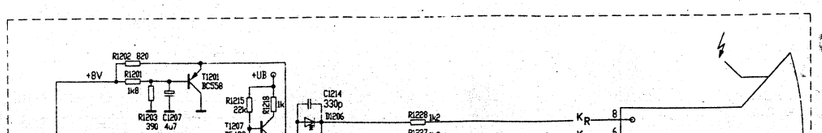
STEREO IF BG I MODUL



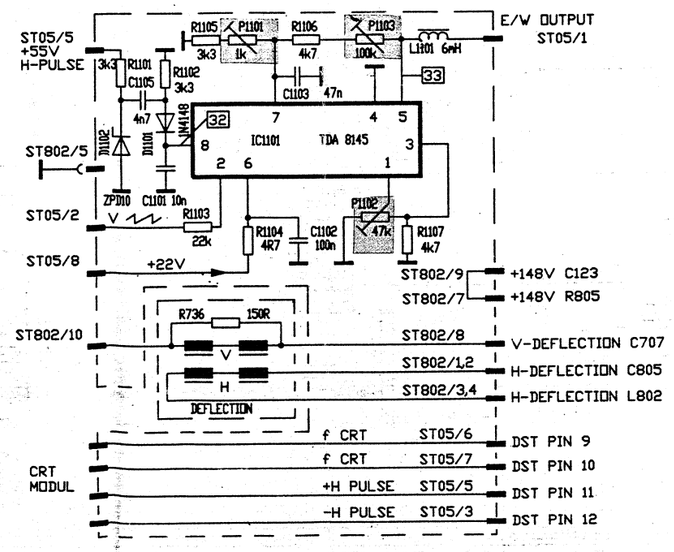
STEREO AF MODUL WITH DECODER AND POWER AMPLIFIER



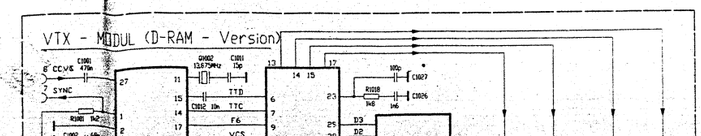
CRT MODUL

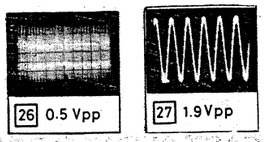


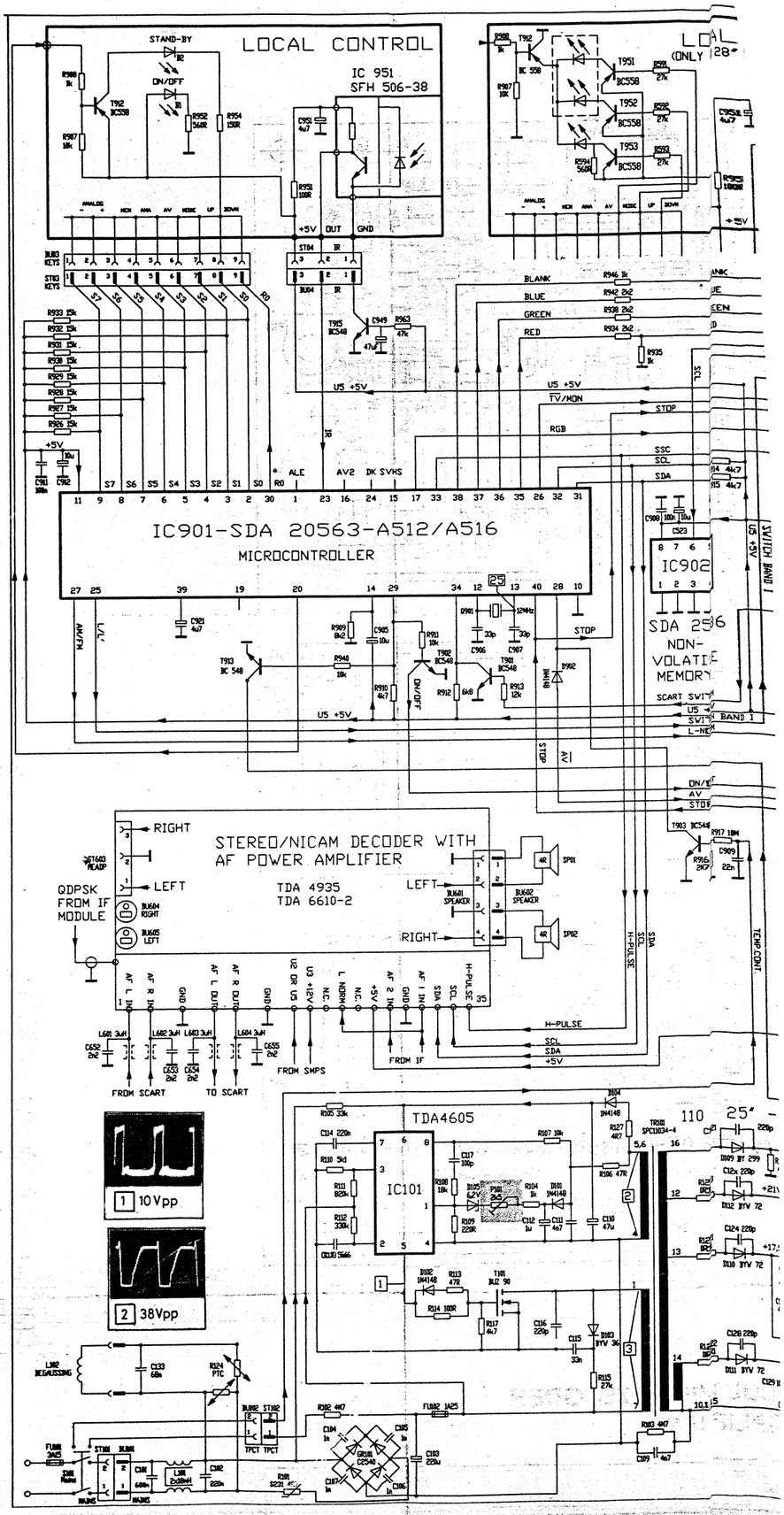
EAST/WEST MODUL



TELETEXT DECODER (OPTIONAL)







MAIN CHASSIS 10.3 110° *STEREO*

LOCAL CONTROL
IC 951
SFH 506-38

LOCAL CONTROL
(ONLY FOR 28" STEREO/NICAM TV'S)
IC 951
SFH 506-38

TUNER
TFK 2002PHC
SMSG TECC2989PA3G
SLCM SK1101

IF STEREO MODUL
TDA5830-2
TDA5850
TBA229-2

TELETEXT MODUL
SDA 5231
SDA 5248
uPD 4364-15L OR HYB 514256A-10

IC901-SDA 20563-A512/A516
MICROCONTROLLER

IC902
SDA 2586
NON-
VOLATILE
MEMORY

PAL/SECAM MODUL
TDA 4555
TDA 4565

IC501 - TDA 4680
COLOUR DECODER

CRT MODUL

STEREO/NICAM DECODER WITH
AF POWER AMPLIFIER
TDA 4935
TDA 6610-2

110 25" - 28" RANGE

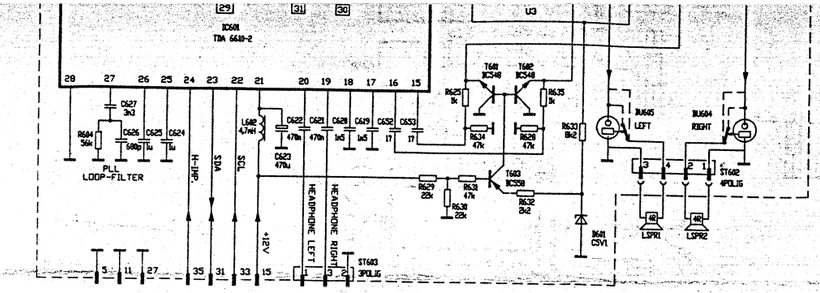
TDA4605
IC101

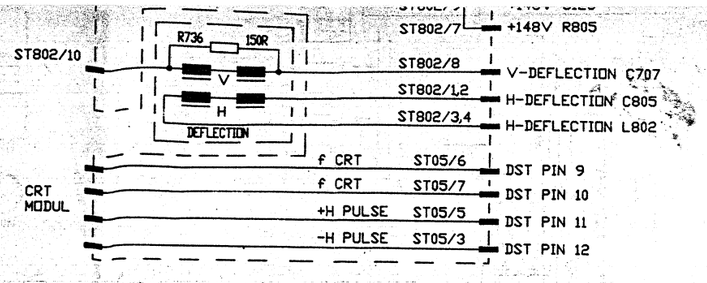
IC701 - TEA 2029
SCANNING PROCESSOR

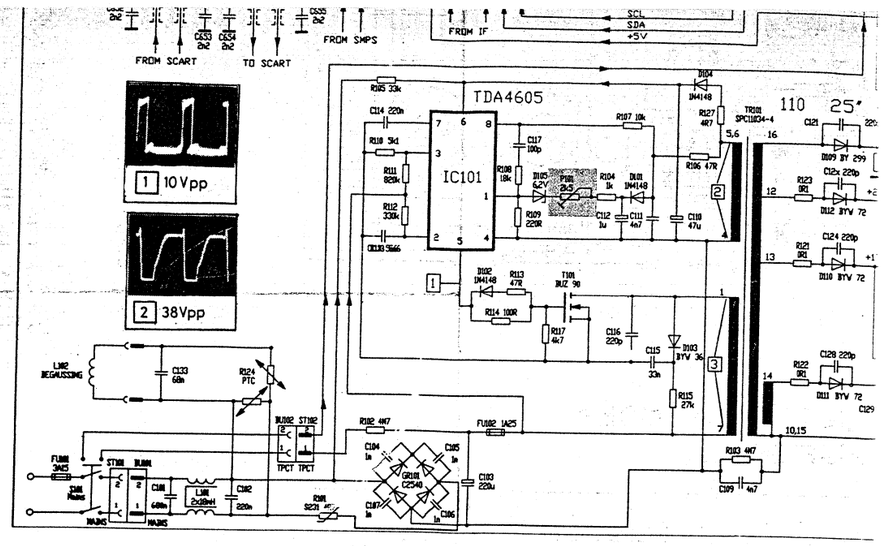
E/W MODUL

1 10Vpp

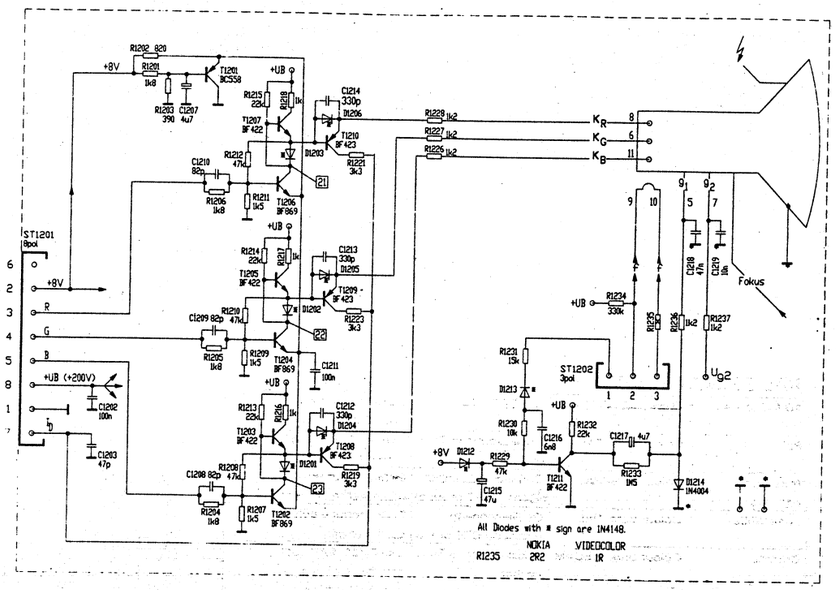
2 38Vpp



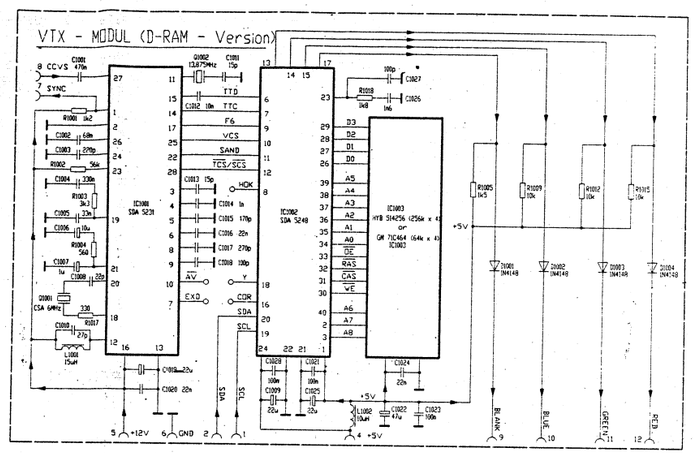


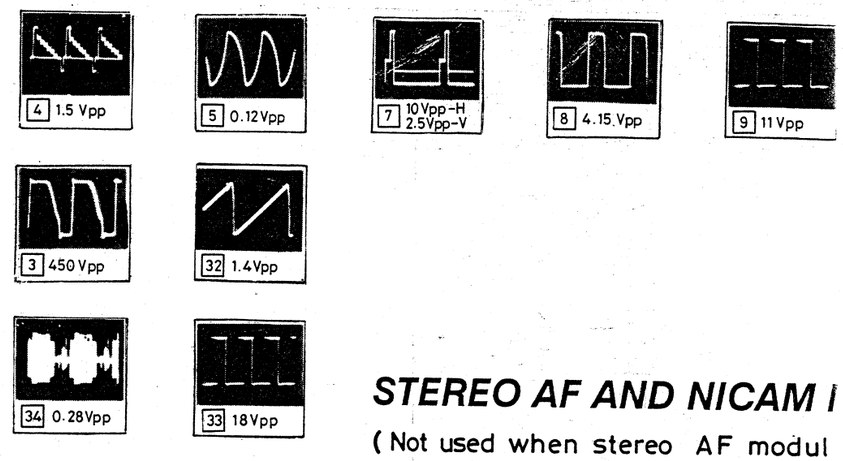


CRT MODUL



TELETEXT DECODER (OPTIONAL)



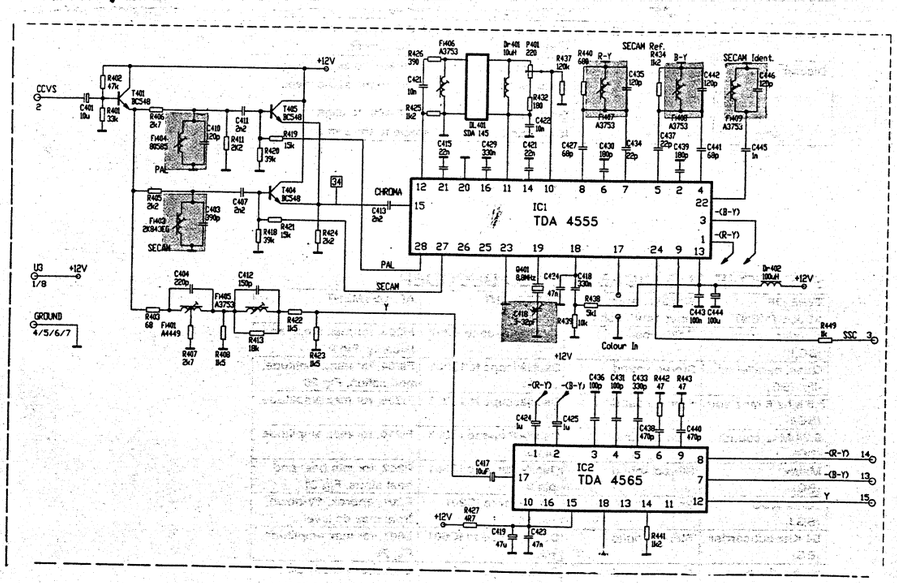


STEREO AF AND NICAM I

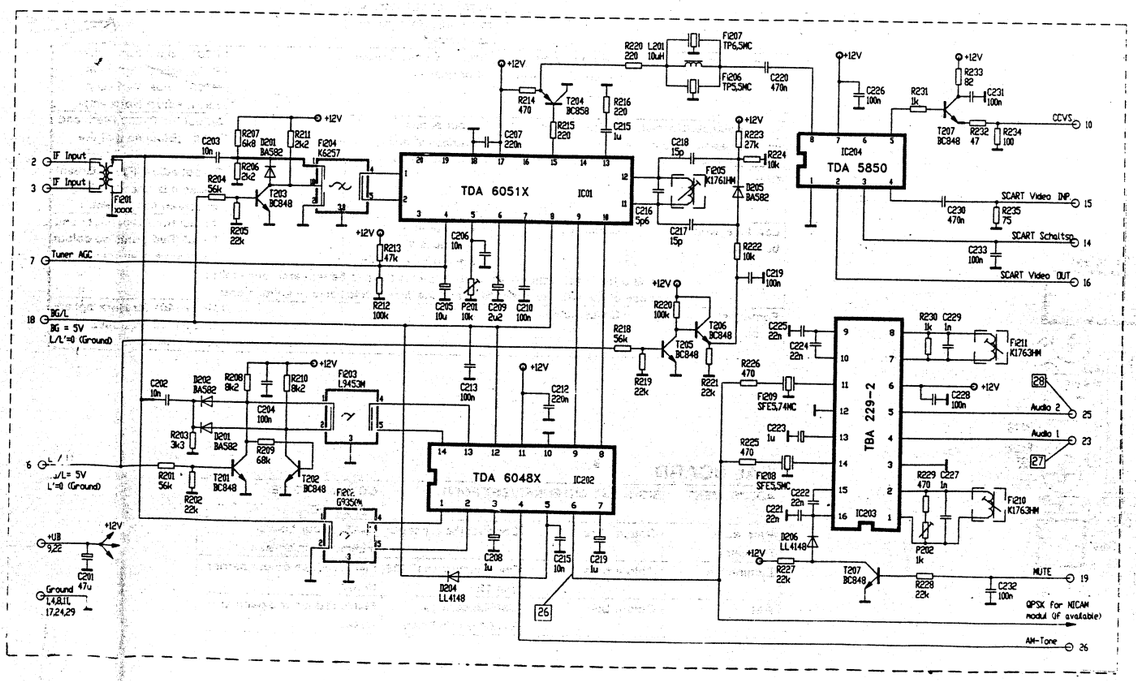
(Not used when stereo AF modul

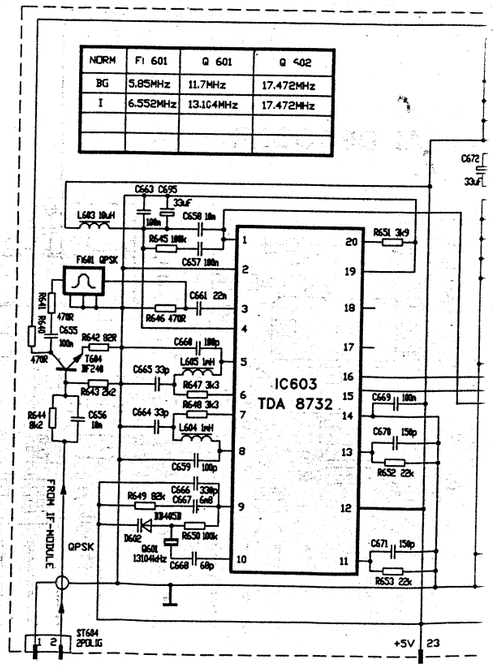
NICAM –

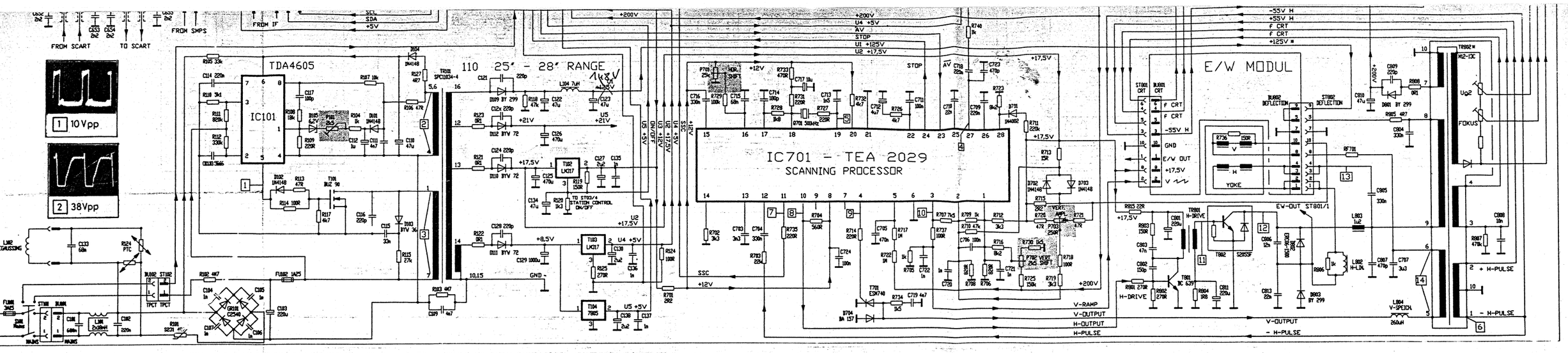
PAL/SECAM DECODER



PAL BG STEREO / SEC LL' MONO IF

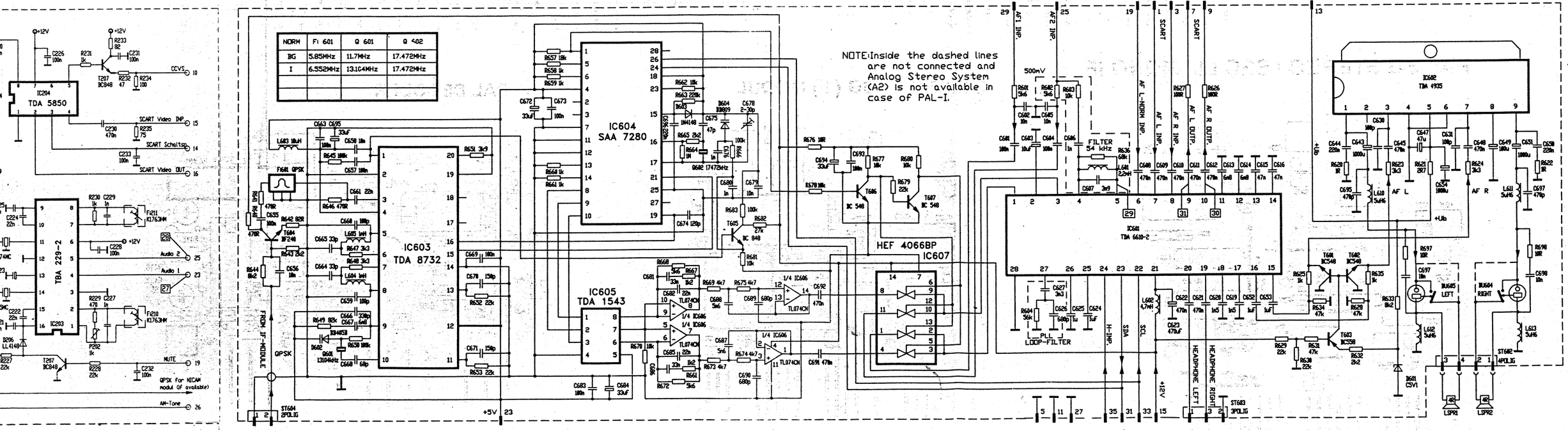






STEREO AF AND NICAM MODUL WITH POWER AMPLIFIER (OPTIONAL)

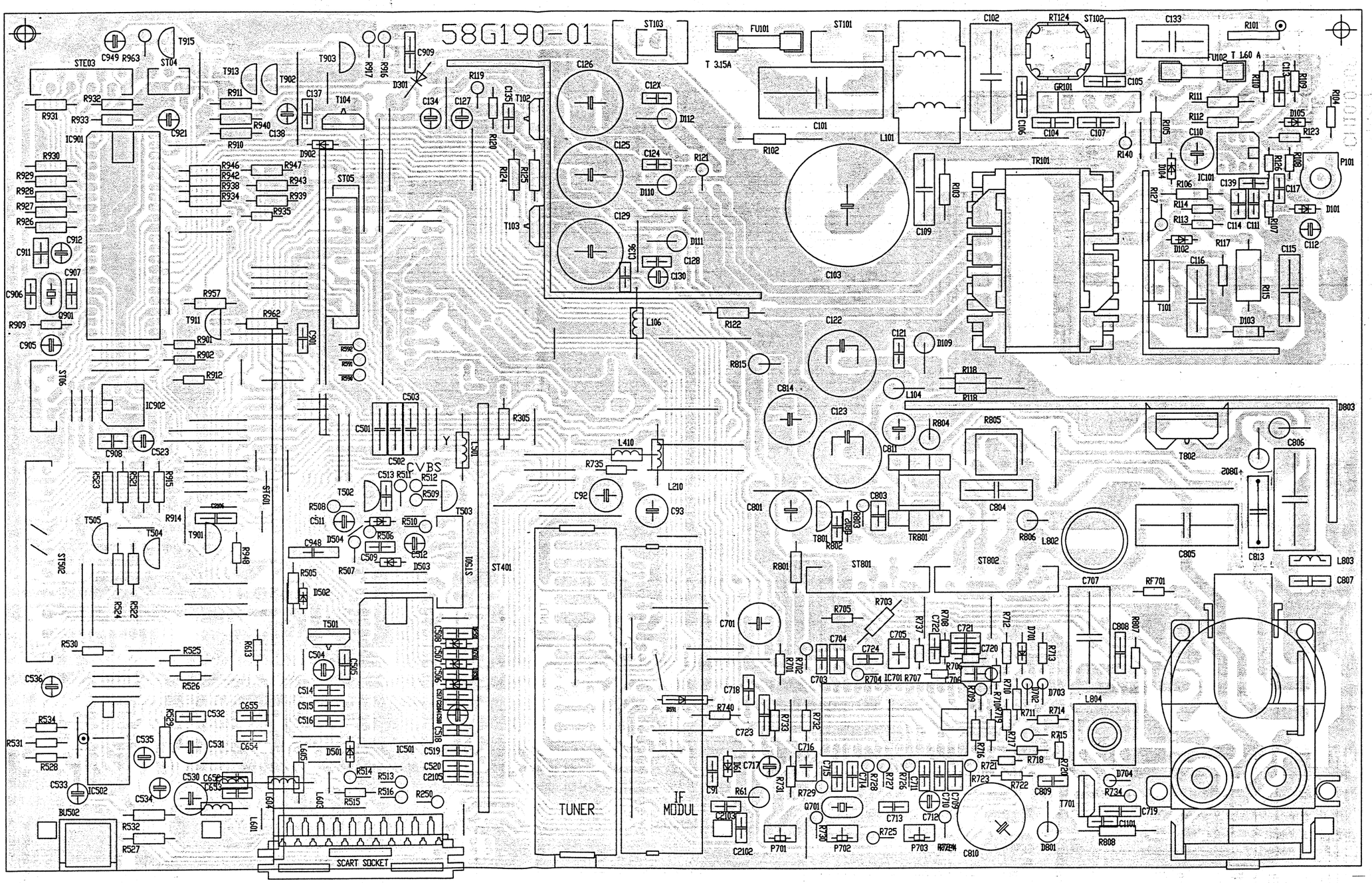
(Not used when stereo AF modul with Decoder is available.)



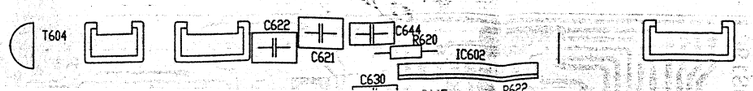
NORM	Fi 601	Q 601	Q 602
BG	5.85MHz	11.7MHz	17.472MHz
I	6.552MHz	13.104MHz	17.472MHz

Subject to change without notice

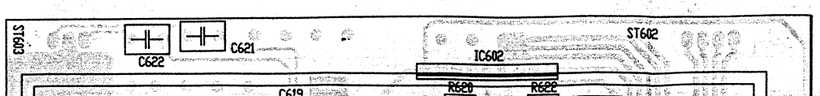
MAIN CHASSIS 110° STEREO



STEREO AF AND NICAM MODUL WITH POWER AMPLIFIER



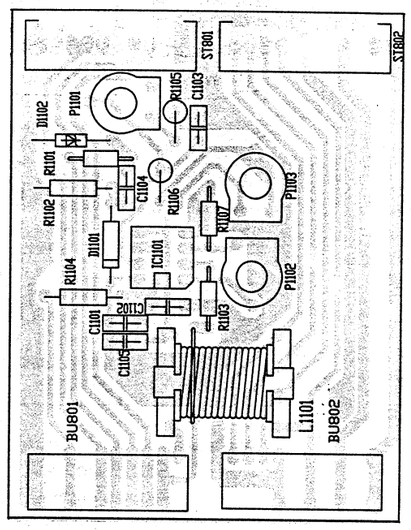
STEREO AF MODUL WITH DECODER AND POWER AMPLIFIER



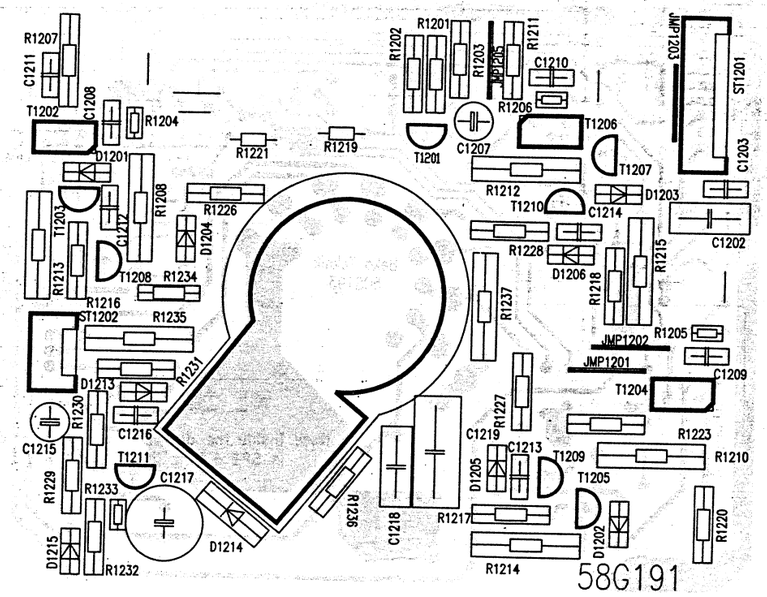
Beko
Bekotechnik Sanayi A.S

GTV shliroeny
Kouchnuky ob
Svarky 3

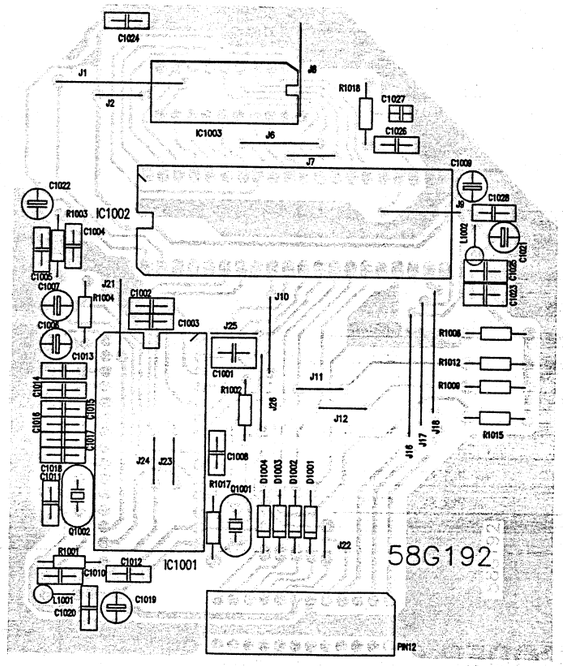
EAST/WEST MODUL



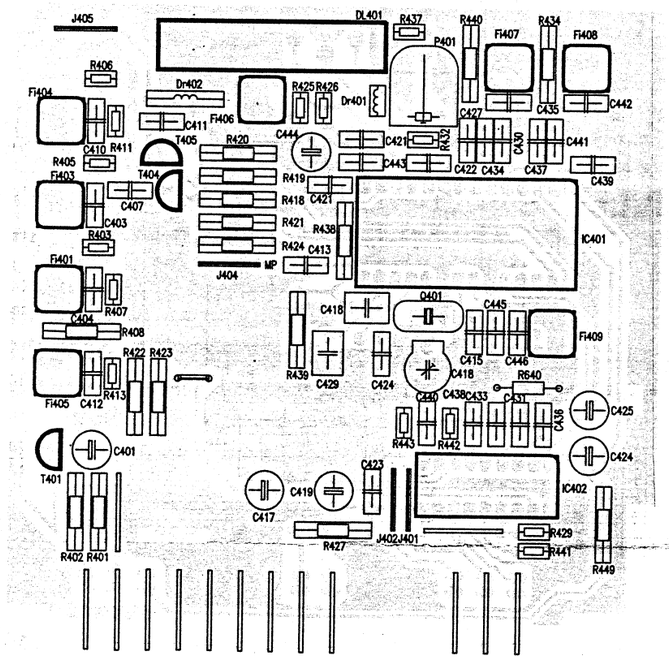
CRT MODUL



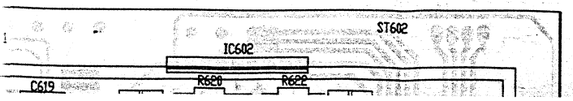
TELETEXT DECODER (OPTIONAL)

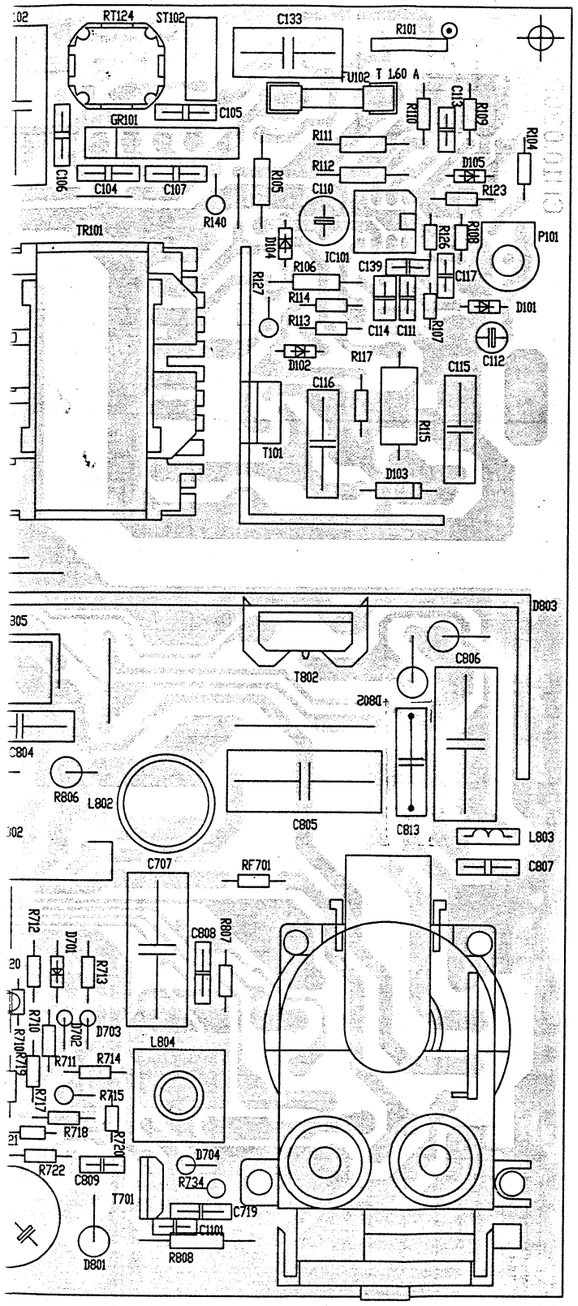


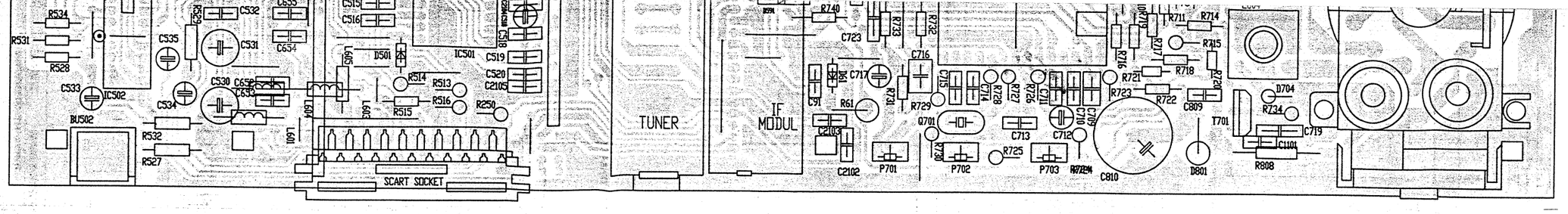
PAL/SECAM DECODER



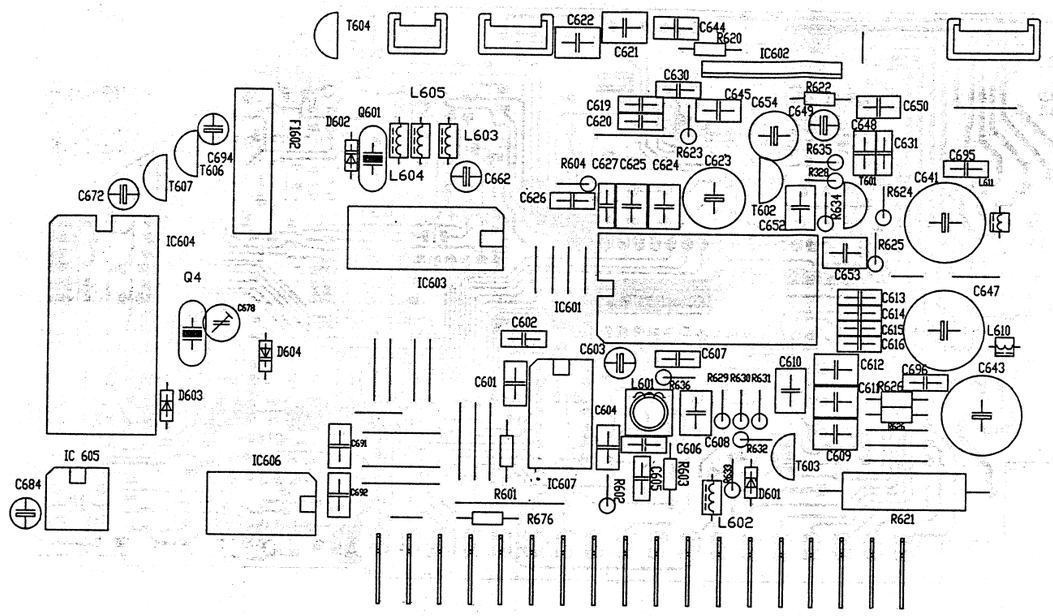
UL WITH DECODER
PLIFIER



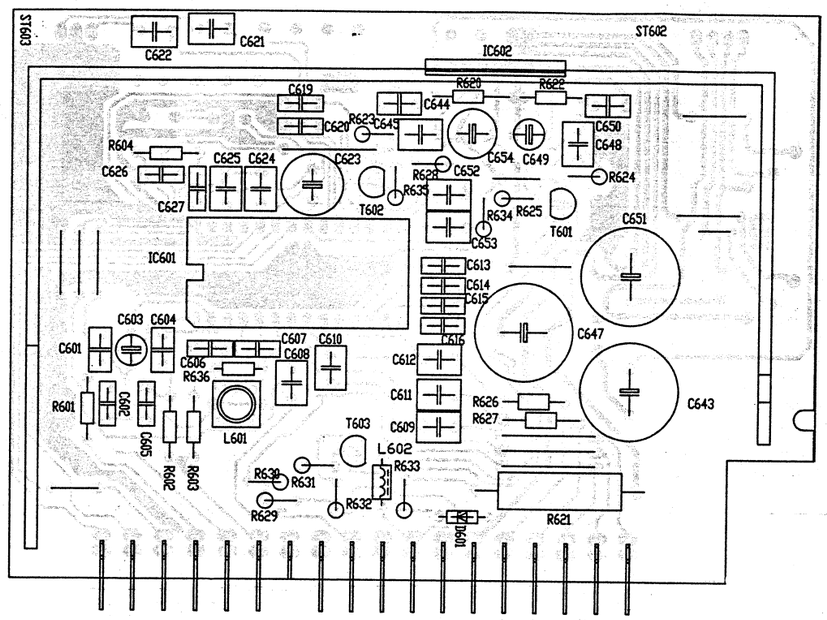




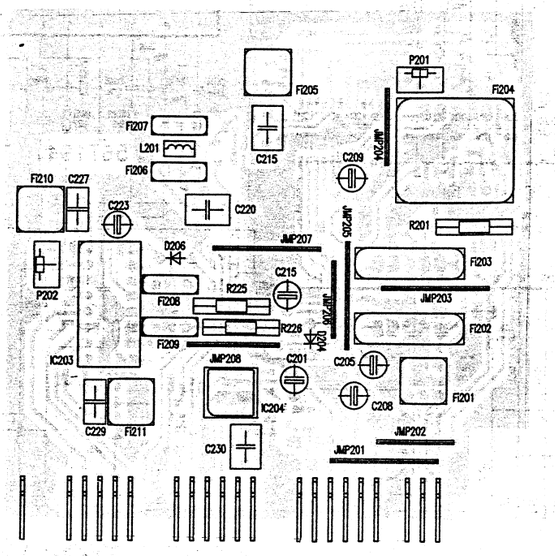
STEREO AF AND NICAM MODUL WITH POWER AMPLIFIER



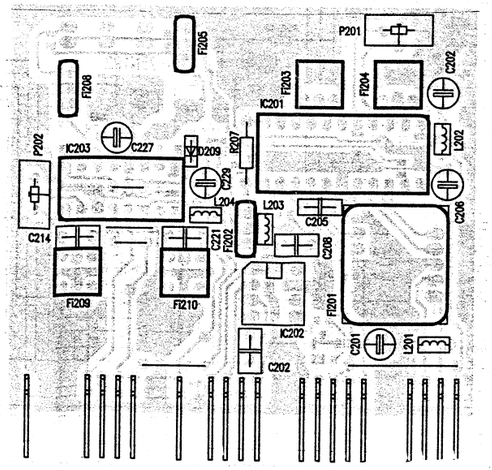
STEREO AF MODUL WITH DECODER AND POWER AMPLIFIER



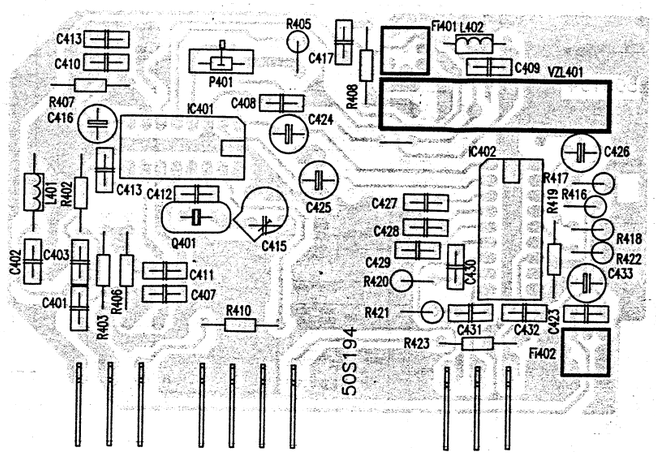
PAL BG STEREO / SEC LL' MONO IF

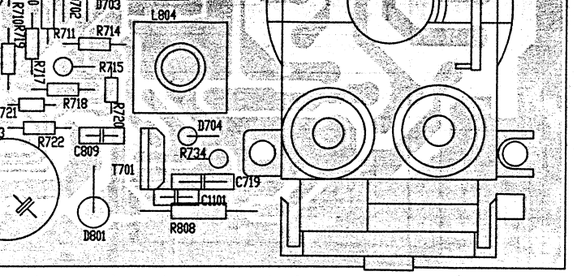


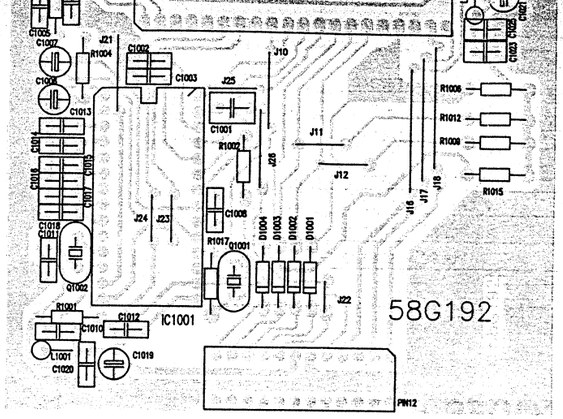
STEREO IF BG (I) MODUL

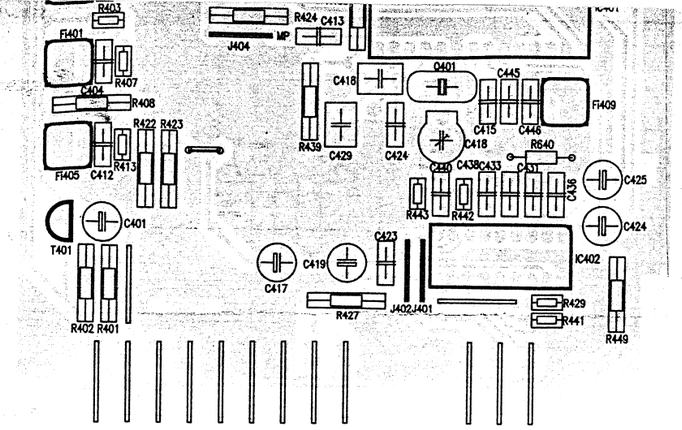


PAL DECODER

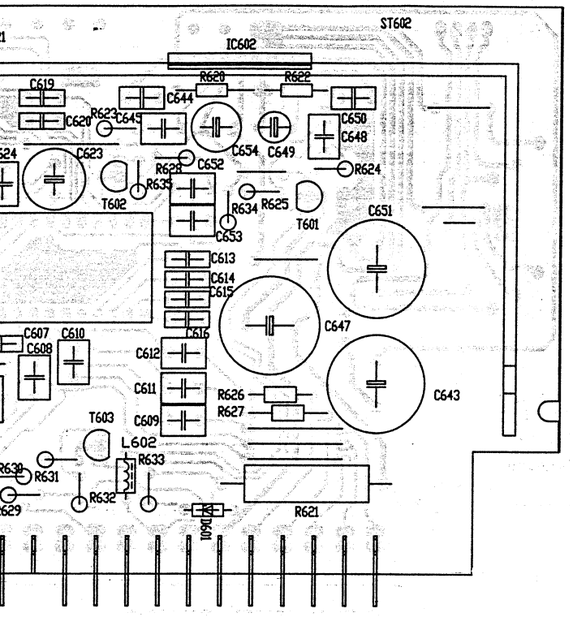




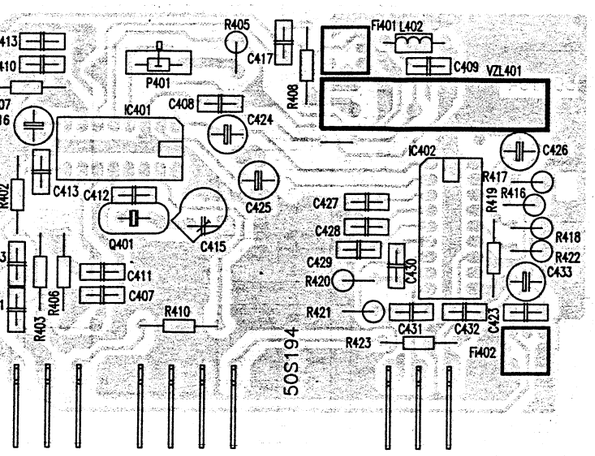




OUL WITH DECODER PLIFIER



PAL DECODER



SERVICING OF THIS TV SHOULD ONLY BE CARRIED OUT BY A QUALIFIED PERSON

Short C103 before changing IC101, T101 or any other component in primary side of smps.
Oscillascope traces are measured at antenna signal 1mV from colourbar generator.
All adjustments and alignments are to be made at 220V line after a warm-up period of approx. 5 minutes.
All controls are indicated in the circuit diagram.
Stereo sound Channel 1, 3 Khz- Channel 2, 1 Khz.

TYPE OF ADJUSTMENT	Signaal at Antenna input 1mV/75ohms	PREPARATION	CONNECTION OF INSTRUMENT	ADJUSTMENT
U1 Voltage		Beam current zero (Bright.,Contr.,Colour levels at min.)	Voltmeter to D109 cathode	Use P101 to adjust for 148Vdc.
Screen		Bright.,Contr.,Colour levels at min.P501 mid P1201,P1202,P1203 at mid range. AV position is selected.	Voltmeter to T1204 collector	Adjust the Screen grid pot to read 158V
Geometrical	FuBK test pattern or Centre Cross with Circle	Bright., Contr., Colour at normal.		P701, adjust horiz. shift P702, adjust Vert. shift P703, adjust Vert. ampl. L801, adjust Horiz.ampl.
White balance.(Normaly white balance should be adjusted with Colour Analyzer.)	White pattern	Colour at min Brihtness at mid. Contrast at max		Adjust the P1203 (Red) and P1201 (Blue),so that the best white picture available Do not adjust P1202(Green) cause it is already adjusted in screen adjustment.
Low level white balance.	Colour bar	Colour at min. Brightness at mid. Contrast near to min.		Adjust the P1204(blue) and P1205(Red), until no colour influences grey scale.
High and low level white balance adjustments have to be repeated once more, because of the inter action of high and low level white balance adjustments.				
East-West pincushion.	Cross hatch			Use P1101 for Horz. apl.adj. Use P1102 for trapez. adj. Use P1103 for E-W ampl.adj.

PAL BOARD

ADJUSTMENT	SIGNAL AT ANTENNA	TEST POINTS	CONTROL TO BE ADJUSTED
Reference oscillator	Colour bars	Connect the A jumper	C415, colour flow is minimized on screen.
Luminance	Colour bars	Oscillascope to IC402 pin 12	Fi402, reduce colour carrier to min.
PAL	Colour bars	Oscillascope to R1204 on CRT board.	Fi401, reduce the gaps at peaks.

PAL/SECAM BOARD

ADJUSTMENT	SIGNAL AT ANTENNA	TEST POINTS	CONTROL TO BE ADJUSTED
Pal	Colour bars- PAL	Oscillascope to T405 emitter.	Use Fi404, to adjust colour carrier max value.
Reference oscillator	Colour bars- PAL	Connect the jumper (IC401 pin 17 ground)	C420, colour flow is minimized on screen.
Luminance	Colour bars- PAL	Oscillascope to R1204 on CRT board	Fi401, reduce colour carrier to min.
Chroma	Colour bars- SECAM	Oscillascope to T404 emitter.	Use Fi403, for equal amplitude of two successive lines.
Secam identification	Colour bars- SECAM	Voltmeter with High intern.resistance to IC401 pin 21.	Use, Fi409, to adjust the potantial difference to its max value.
Colour trap	Colour bars- SECAM	Oscillascope to IC402 pin 12.	Use Fi405, to minimize colour carrier.
Discriminator	Colour bars- SECAM	Oscillascope to IC402 pin 8. Oscillascope to IC402 pin 7.	Use Fi407, to align the wave shape to the same level. Use Fi408, to align the wave shape to the same level.

STEREO IF AND NICAM/STEREO DECODER

TYPE OF ADJUSTMENT	Signal at Antenna input 1mV/75ohms	TEST POINT	ADJUSTMENT
IF video carrier. (BG,I)	Colour bars	Oscillascope to R207	Fi203, for max ampl. and linearity. Fig 24
Quasi parallel soun -IF (BG,I)	Stereo sound	Oscillascope to IC201 pin 21	Fi204, for min amplitude. modulation. Fig 26
5.5 Mhz/6 Mhz sou (BG/I)	Stereo sound	Oscillascope to IC203 pin 4	Fi209, for max amplitude.
5.74 Mhz sound. (BG)	Stereo sound	Oscillascope to IC203 pin 5	Fi210, for maz amplitude.
Matrix (BG)	Stereo sound	Oscillascope to IC601 pin 9	P202, for min beat and best sinus. Fig 31
Tuner AGC (BG,I)	Band III VHF	Voltmeter to IC201 pin 14	P201, approx. 1V down from max dc level
54 Khz subcarrier (BG)	Stereo sound	Oscillascope to IC601 pin 5	L601, for max amplitude Fig 29
Nicam decoder (BG,I)	Nicam sound	Oscillascope to IC601 pin 1	C678, for exactly DC level right at the center of square wave.